

Susan West Lesson Plan #1 Water, Energy, and Waste
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First Grade Introduction	In the fall of the school year first grade students begin a science unit on solids, liquids, gas, and weather. As part of that unit it is very important that students learn about the water cycle. For this reason students will be taught about the water cycle and the three key words that identify that cycle. Students need to learn what a water cycle is and it's process. Using picture books and making diagrams provide an ideal way to make the invisible visible, for example water vapor and evaporation. Making diagrams and verbally explaining the facts of the water cycle are effective techniques for teaching this process to students of this age and stage of development.	
Unit of Study:	Science / The Water Cycle:	
Title	Drops of Water: Where does it come from?	
Time:	One hour	
Teaching Point:	To teach students about the water cycle using three key words: condensation, evaporation, and precipitation.	
Essential Questions	<ol style="list-style-type: none"> 1. What is the water cycle? 2. Can you explain what is happening during the water cycle? 3. Can you identify the three key words of the water cycle? 	
Lesson Objectives	Students will be able to create a map of the water cycle using the three key words condensation, evaporation, and precipitation.	
Standards:	<p>CCS: 2.1C Science Water is recycled by natural processes on Earth.</p> <ul style="list-style-type: none"> • Evaporation: changing of water (liquid) into water vapor (gas) • condensation: changing of water vapor (gas) into water (liquid) • precipitation: rain, sleet, snow, hail • runoff: water flowing on Earth's surface • groundwater: water that moves downward into the ground <p>Danielson Domain 3C Competency-Engaging students in learning. CCS Language Arts 1.RL.1-Ask and answer questions about key details in a text. 1.SL.2- Ask and answer questions about key detail in a text read aloud or information presented orally or through other media.</p>	

	1.L.6 Use words and phrases acquired through conversations, reading and being read to, and responding to text, including using frequently occurring conjunctions to signal simple relationships.	
Connection/Purpose:	The goal of this lesson is to teach students about the water cycle. Students will develop an understanding of the water cycle using the three major points condensation, evaporation, and precipitation. Students will then use that knowledge to create a model of the water cycle.	
Materials	<ul style="list-style-type: none"> • Down Comes The Rain: by Franklyn Branley • Water Cycle Handout: One for teacher and One for the student • Water Cycle Cutout: Copy on card stock, one for each student • Water Cycle Arrows: One copy for the large diagram • Blue, Yellow, and Brown construction paper • Sand and Grass clippings • Cotton Balls (stretch out the cotton ball to form “clouds”) • Crayons/Colored Pencils/Markers • White Glue • Scissors • Masking Tape • Handout #1 water cycle process signs • Handout #2 water cycle handout • Handout #3 water cycle cut outs • Handout #4 water cycle arrows 	
Teaching:	<p>Day One</p> <p>Before reading the book ask students what is a water cycle? Can you explain what what is happening during the water cycle? Can you identify the three key words of the water cycle?</p> <ul style="list-style-type: none"> • Down Comes The Rain. While reading be sure to emphasize “condensation” “evaporation” and “precipitation”. These are the major points of the water cycle. • When the story is finished, ask students to turn and talk to recall the three steps water goes through (evaporation, condensation and precipitation) and what they are. Use the process signs provided (see Attachment One). You may choose to post these where the students can see them during the discussion. • Show students the water cycle handout (see Attachment Two) and touch each area on the picture map. This will help them see what is exactly necessary for each of the three steps. • Tell students that together the class will be creating a very large water cycle model. They are each going to make a portion of the water cycle. Teacher Note: It will be necessary for the teacher to decide if each learner will make 	

	<p>each piece of the water cycle or if students will be arranged into groups to work on the water cycle.</p> <ul style="list-style-type: none"> • Distribute water cycle cut outs (see Attachment Three) Students should color raindrops blue and cut them out. • Cut out clouds and fill them in using white glue and stretched out cotton balls. • Cut out blue construction paper to look like water. • Cut out brown construction paper to look like land (optional: decorate using sand and grass attached with white glue). • Cut out yellow construction paper to look like the sun. • When all pieces have been constructed, set aside to dry. • Review the terms: condensation, evaporation, and precipitation. <p>Day Two</p> <ul style="list-style-type: none"> • Ask students to recall the three major parts of the water cycle and what you need for to take place, Be prepared to reference Down Comes The Rain. • Distribute the water cycle handout (Attachment Two) to each child. Review each of the components and invite them to add color. Assemble the pieces to the large water cycle by allowing the students to place their pieces on the diagram. Invite students to use their handouts as a guide. • Add the directional arrows to complete the diagram (see Attachment Four). • Tell students that the water moving about the cycle does not fall exactly where it evaporated from. Some places receive more and some receive less rain fall. Each place has different needs for its water. The area may not receive enough precipitation in the form of rain fall and that can be a problem. That is why it is so important to conserve water. Who needs to conserve water? Everyone! Explain to the students that they can also help their friends and family conserve water by sharing what they have learned about water. 	
Assessment:	The teacher will observe the students participation in group discussions, construction and assembly of their water cycle.	
Rubric	<p>4 – Demonstrates knowledge of all the steps in the water cycle including the three key words.</p> <p>3- Demonstrates partial knowledge of the water cycle using two or less key words.</p> <p>2- Demonstrates some knowledge of the water cycle using one key word.</p> <p>1- Demonstrates no knowledge of the water cycle process.</p>	
Lesson Adaptation	Have the water cycle pieces be movable. If you use tacks or magnets to hold them down, then you can re-enact the water cycle as students put it up on the board. Once the students have the idea, have groups of four students come up to the board and try to put it together as fast as possible. Time each group to see which group goes the fastest. Once you have a record, as review, have students try to beat their record before the end of the unit.	
Diifferentiation	<p>Use pictures and vocabulary cards of the three key words. Using a thoughtful engaging picture book on the water cycle might make a difference for some students.</p> <p>1.</p> <p>.</p>	